DOCUMENT RESUME

ED 130 524 FL 008 101

AUTHOR Leino, Anna-Liisa
TITLE Implementation of Some Affective Objectives in Different Foreign Language Teaching Situations as Rated by Student Teachers. Research Bulletin, No. 45.
INSTITUTION Helsinki Univ. (Finland). Inst. of Education.
PUB DATE Nov 75
NOTE 52p.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Affective Objectives; *Cognitive Objectives; Educational Objectives; *Language Instruction; Language Teachers; Learning Activities; *Psychomotor Objectives; Questionnaires; *Second Language Learning; *Student Teachers; Surveys; Teacher Attitudes; Teaching Methods

ABSTRACT

Affective learning, psychomotor learning and cognitive learning are three objectives of education; they cannot be completely separated and often one type of objective may be a means of achieving another. This study attempted to begin bridging the gap between the affective objectives and the cognitive-psychomotor objectives in foreign language instruction. It examined the extent to which it is possible to implement certain general and specific affective objectives in various foreign language teaching situations based on cognitive-psychomotor objectives. The questionnaire used for this study asked student teachers to rate the ease of implementation of affective objectives presented in the form of activities occurring in a foreign language class. The following activities and objectives were included: (1) pronunciation; (2) composition writing; (3) practicing structures in writing; (4) writing from dictation; (5) extensive reading; (6) oral practice in structures; (7) intensive reading; (8) listening comprehension; (9) translation; (10) conversation; (11) reading aloud. Subjects were 69 student teachers of foreign languages at the University of Helsinki. The results show what the teachers felt to be the best activities for accomplishing certain goals. Appendices furnish the questionnaire used, explanations of objectives and statistical analyses of the responses. (CHK)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED130524

RESEARCH BULLETIN

Institute of Education
University of Helsinki

SF-00100 Helsinki 10
Finland

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

No. 45

November 1975

Anna-Liisa Leino

IMPLEMENTATION OF SOME AFFECTIVE OBJECTIVES IN DIFFERENT FOREIGN LANGUAGE TEACHING SITUATIONS AS RATED BY STUDENT TEACHERS

FL008101

Anna-Liisa Leino

IMPLEMENTATION OF SOME AFFECTIVE OBJECTIVES IN DIFFERENT FOREIGN LANGUAGE TEACHING SITUATIONS AS RATED BY STUDENT TEACHERS

Institute of Education
University of Helsinki
1975

3

TABLE OF CONTENTS

1. Introduction 1

1.1. Purpose of the Study 4

1.2. Problems 6

2. Procedure and Results 7

2.1. Questionnaire 7

2.2. Subjects 16

2.3. Results 17

3. Discussion 24

Bibliography 27

Appendices 30

1. Introduction

The general objectives of education can be divided into cognitive abilities or skills, affective processes and outcomes, and psychomotor abilities (Klausmeier et al. 1971). Taxonomies of each area have been developed for the purpose of giving teachers a better perspective on their teaching and evaluation procedures, of facilitating curriculum development and communication between teachers (and administrators) and of making it easier to sequence instruction. The division of the realm of educational objectives into the three domains is, however, arbitrary in the sense that outcomes of each area are very closely related. Cognitive and affect can never be completely separated; the realisations of the cognitive outcomes are, for example, accompanied by changes in affect (Bloom et al. 1971; Krathwohl et al. 1964). In one situation a pupil, while learning facts, principles or skills, may also simultaneously be learning to like or dislike the subject. In another situation he may reach a high level of cognitive achievement as well as an interest in the material. In a third situation his cognitive achievements may remain at a low level but, still, he may develop a liking for the subject. These extra unplanned learnings are often referred to as "concomitant outcomes". According to Smith et al. (1957)

these learnings often turn out to be undesirable in the subject curriculum. There is, however, no empirical evidence to support the claim frequently posed that undesirable concomitant outcomes are more typical of the subject curriculum than other types of curricula.

It is also possible to carry out instruction in such a way that the achievement of an objective of one domain can be considered as the planned means to the achievement of an objective in the other. This happens when, for example, informative experiences are used in the development and change of attitudes. In some instances an affective goal can be used as a means to achieve a cognitive one. The teacher, for example, attempts to make his pupils interested in a subject-matter in order to facilitate learning.

It has often been claimed that teachers do not give enough attention to the affective objectives but concentrate mainly on the cognitive and psychomotor objectives, which is natural since cognitive training has dominated teacher preparation. Reasons for this state of affairs can be found in the many problems connected with the affective objectives. First of all, how should one teach for them? The techniques a teacher could use to help a pupil develop, for example, a positive attitude towards a subject are not very well defined. A key question is whether specific learning situations are necessary for the implementation of these objectives or whether they are mainly influenced e.g. by the total school environ-

ment. This question is closely connected with that of the length of time needed for the achievement of them. Can they be achieved in relatively short instructional periods or would more time be necessary? Krathwohl et al. (1964) speak about the importance of a single hour of classroom activity under certain conditions in the achievement of both affective and cognitive objectives. According to them research into these peak learning experiences might prove most fruitful in connection with affective objectives. The next problem concerns the evaluation of achievements in the affective area. How is the teacher to know whether the objectives have been achieved or not ? Evaluation will be impossible, if the achievement of affective objectives is not to be seen in school years but much later in life. And even if this were not the case evaluation would still be a problem owing to the lack of instruments. All that can be said, at this juncture, is that work has been done and is being done in order to develop instruments for measuring affective outcomes.

A special problem of its own is the extent to which affective objectives can be regarded as subject specific, on the one hand, or common to all school subjects, on the other. The former will be called here specific affective objectives and the latter general affective objectives. There is an implicit assumption in the taxonomy of the affective domain (Krathwohl et al. 1964) that the affective objectives are

specific, which assumption has been made explicit by Valette (1971) ard Valette et al. (1972) in their application of the taxonomies to foreign language instruction. Specific affective objectives represent, however, a very narrow part of the affective domain, since they are mainly concerned with the nature of learning experiences within a single school subject.

It seems that the idea of affective learning progressing " hand in hand " with learning the language might easily lead to the kind of learning that is called "defensive" by Curran (Stevick 1974). In this kind of learning pupils deal with questions as if they were darts thrown at them. Their task is to avoid embarrassment that comes from not knowing the right answer. In this pattern establishing good personal relationships with pupils is an objective, not a prerequisite, of learning, which would be the case with "receptive" learning. According to Stevick (1974) foreign language teachers should not give so much attention to developing and revising their methods and materials but try to create favourable conditions for receptive learning, which has wholesome effects on the total personality of the pupil.

1.1. Purpose of the Study

This study is a continuation of two previous studies (Leino

1974a, 1975 b) and an independent part of a larger project (Niskanen 1973a). The study makes an attempt to start bridging the gap between the affective objectives and the cognitive-psychomotor objectives in foreign language instruction by looking for an answer to the general question of the extent to which it is possible to implement certain general and specific affective objectives in various foreign language teaching situations, which are based on cognitive-psychomotor objectives. The study is a simplification of a complex phenomenon. It is to be noted, for example, that the nature and frequency of situations is not specified. As previously suggested the achievement of objectives, particularly those in the affective area, is bound to be affected by the nature of learning experiences pupils have had: the extent to which their experiences have been rewarding or frustrating. Notwithstanding the crudeness of the attempt, the writer, however, believes it possible to obtain some useful information. For example, the writers of our comprehensive school curriculum have left the content unspecified in which the general affective objectives are meant to be implemented with the implication being that they should be given equal attention in every subject-matter area. It is, however, possible that teaching for certain affective objectives can be carried out better in connection with some subjects than others. Thus the problem would be to find out what general affective objectives are best suited to be implemented in connection with what subject-matters. If curriculum planners had in-

formation like this available they could make their curricula more realistic. The writer also considers information yielded by this type of study as a necessary basis of real classroom experimentation, which requires information on which to base decisions as to what situations and affective objectives to include.

1.2. Problems

1. To what extent is the implementation of the affective objectives considered possible by the subjects (to be specified later) in foreign language teaching situations at the higher levels of the comprehensive school?

2. Are there differences between English, Swedish and the languages which according to the Comprehensive School Curriculum can be studied as selectives (French, German and Russian) at the higher levels of the comprehensive school? (In the light of very recent developments the changes of pupils studying selective languages in the comprehensive school seem greatly diminished).

The writer is aware of the fact that the research design of this study is of too general a nature to give an indication of any linguistic factors, specific to different languages, that might contribute or prevent the implementation of the affective objectives, which is an important question in itself.

3. Are the subjects' teaching experiences related to the extent to which they consider it possible to implement the affective objectives in different situations ?

2. Procedure and Results

2.1. Questionnaire

The questionnaire in its simplified form is to be seen in Appendix 1 together with the instruction. In the original form the list of activities was repeated with each affective objective to make sure that previous ratings would not influence the next ones. The questionnaire is based on another one which was developed by the writer for investigating the importance of objectives in foreign language instruction (Leino 1974a). The cognitive-psychomotor objectives in that questionnaire were based on Valette's modification (1971) of the Bloom Taxonomy. In the questionnaire developed for this study the objectives are presented in the form of activities that occur in a foreign language class which means that they are representative of learning objectives. Rating how well the affective objectives can be implemented in connection with each of the 34 cognitive-psychomotor objectives of the original study would have been too enormous a task for the raters and unrealistic in the sense that no language skill is

taught in isolation. Appendix 2 shows the cognitive-psychomotor objectives of the earlier study that can underlie the classroom activities included in this study. It is to be noted that it is possible for the same objective to be practiced (and reached) by means of different activities as well as it is possible for the same activity to serve the implementation of different objectives. The cultural items of the earlier study were omitted since culture is always involved in the language. The social situations in which the activities occur were specified since it is reasonable to assume that the most influential factor which contributes to the achievement of objectives is not so much the activity in itself as the social situation in which that activity occurs. In most cases it is simply ordinary classroom situation but also language laboratory and small group were included. Possibilities provided for teachers to use flexible grouping in a way suggested by the proponents of team-teaching, for example, are practically non-existent. The situations given in the questionnaire are realistic in the sense that they are used and can be used.

The subjects were asked to rate the ease of implementation of affective objectives at the upper levels of the comprehensive school because language teaching at the lower levels with younger pupils is more global with activities being less differentiated than at the higher levels. Senior secondary school level was omitted with the general objec-

tives of education at that level being unknown for the time being. The level chosen is interesting in the sense that as far as the first foreign language is concerned it can be considered to represent a kind of "midpoint" in a continuum between completely controlled linguistic activities and activities with an emphasis on freedom in the choice of expression.

The background to each activity will be dealt with as follows because one has to be aware of the nature of the linguistic activities involved in a situation to be able to understand why certain affective objectives might be related to them. The activities that are either problematic (e.g. conversation) or contraversial (e.g. translation) will be discussed in greater detail than others. Some have been dealt with previously by the writer, in which case a reference is only made to the articles concerned. Finally attention will be given to those affective objectives that were included in the questionnaire.

1. Pronunciation. Teachers had considered objectives concerned with pronunciation among the most important ones at different levels of schooling (Leino 1974a). Pronunciation being a psychomotor activity needs constant practice even after the elementary level especially now that the idea of mastery before progression has been abandoned (e.g. Bosco et al. 1970; Smith 1971).

2. Writing a composition is an activity which is going to be given increasing importance even at the intermediate level since it will be a permanent part of the school leaving examination in senior secondary school. It involves individual selection of vocabulary and structure for the expression of personal meaning and is usually approached through guided writing at the elementary level.

3. Practising structures in writing is mainly based on workbook exercises, in which pupils, for example, have to produce structures that conform to some given pattern or make changes in sentences according to some given principle. These activities have been critized e.g. by Hill (1967) because of low correlation between pupils' ability to perform exercises of the conversion type and their ability to use the same things correctly in writing, which involves freedom in the choice of expression.

4. Writing from dictation involves reproduction of spoken language in visual form. Thus it can be used to practise aural comprehension and discrimination as well as the elements of writing and short-term retention of verbal material. According to Deyes (1972) it can be used as a starting point for almost any kind of language exercise.

5. Extensive reading. The main objective behind this activity is reading comprehension, which has been dealt with in another connection (Leino 1974b).

6. Oral practice in structures means drill or pattern exercises which can take place in class (chorally or individually) or in language laboratory (individually). These activities have been criticized because of the neglect of the communicative aspect of language; on the other hand, there are such elements in the language which occur in closed systems and it is in the practice of these elements that drill activities can prove effective (Rivers 1972).

7. Intensive reading serves also the objective of reading comprehension. It has probably been the most widely used activity in foreign language classes serving as the basis for extending vocabulary, practising structures and familiarizing pupils with the foreign culture.

8. Listening comprehension means extensive listening by means of recorded material, which is also indicated in the questionnaire. This is how teachers use the term at present. The terms intensive and extensive when used with listening are quite new (Allen et al. 1974). The background to listening comprehension has been discussed previously (Leino 1974a).

9. Translation is not supposed to be used at the comprehensive school level at all. It was, however, included in the questionnaire because foreign language text-books contain translation exercises and at least some translation still goes on in schools. The role of translation has been criticised, and justly, because linking words and grammar of the native language with its foreign language equivalents does not give attention to the fact that every element in a language is a part of a unique and complex system. There is, for example, very seldom an exact correspondence between the tenses in two languages (Green 1970; Taylor 1972). As a result of the previous misuse of translation we seem to be suffering from a "sub-conscious anti-translation complex" (Taylor 1972, p.56), which has led to a total ban on translation. It has been pointed out, however, that translation is a necessary skill because of the increasing amount of translation going on in the world. Many people who have studied a foreign language will often have to translate or interpret into and from the foreign language. King (1973) considers it a pity that so many people will engage in it without having had a chance to practise it under supervision. There seems to be an agreement that translation should not be rejected but, if it is properly used, it has a rightful place in foreign language teaching (Green 1970; King 1973; Smith 1971; Taylor 1972),

even if it cannot be usefully taught at lower levels of attainment (King 1973).

10. Conversation. The most problematic area of foreign language teaching is that of conversation. Pupils need an opportunity to use the foreign language by practising unstructured conversation. If it takes place in smaller groups than a class it usually means a less restricted atmosphere. There are several problems in conducting a conversation class or group such as whether or not to correct errors, what to do with the silent person for whom it is difficult to communicate even in his own language, or how to see that no individual is dominating the whole scene (e.g. McGregor 1974; Rivers 1968). Conducting a conversation needs careful preparation from the teacher. As it is difficult for foreign language teachers to keep up their oral fluency it has often been proposed that native teachers should be the ones who conduct conversation classes at school. The possibilities of having them are, however, limited to very few occasions at the present in Finland. In order to create instructional strategies for teaching conversation Jakobovits et al. (1974) are developing "transactional engineering analysis" which could be used for intergrating two steps of foreign language teaching: one of familiarizing pupils with the basic of the language and the other of enabling them to partake in a conversational exchange.

11. Reading aloud is a widely used activity and also a very contraversial one. Hill (1967) dismisses it altogether as unsuitable for the teaching of spoken foreign language; it demands minimum effort on the part of the teacher and can thus be considered as no more than an unenterprising resort of incompetent teachers, Moody (1974) sees it as valid extension of spoken language, a valuable social skill that has to be practised as such. Rivers (1968) sees its use in developing the mechanics of fluent speech particularly if conversational material is used.

As regards the affective objectives of the previous study (Leino 1974a) they were based on Niskanen's research (1973a) representing interests, attitudes, values and integration of personality. The number of the affective objectives to be employed in this study had to be limited in order not to create unwillingness on the part of the subjects to answer the questionnaire on account of too great a number of ratings to be performed. Of the general affective objectives of the previous study two of the most important ones were included: de elopment of the co-operation and ability to work independently and purposefully. The specific affective objectives are as follows: courage to speak the foreign language, a positive attitude towards foreigners, a positive attitude towards the study of the foreign language and an

interest in the foreign language. These are practically the same as those used previously. It is to be noted, however, that these specific objectives refer to the foreign language in general not to English in particular as was the case previously.

The activities as well as the affective objectives are presented at random order in the questionnaire.

2.2. Subjects

The subjects were student teachers of the Institute of Teacher Education, University of Helsinki. It was decided to have student teachers as subjects instead of in-service teachers for the following reasons:

- in-service teachers are obliged to participate in further training because of our school reform. The introduction of the new school system has usually started with the general aims of education and the way in which that training has been organized has created opposition among the participants. The unwillingness of teachers to co-operate in research, which has been observed on many occasions, may be a reult of the negative attitudes created by compulsory further education.
- student teachers can be considered to have a wider perspective over the field of foreign language instruction on account of opportunities for repeated observations of master teachers and fellow student teachers at work at different levels.

The subjects (N=69) were student teachers of foreign languages who attended lectures on foreign language didactics in January, 1975. The major foreign languages of the subjects are the following: English (N=34), Swedish (N=20), German (N=5), French (N=5). As regards the subjects' teaching experience prior to student teaching 25 had no experience, 20 less than a year and 24 more than a year.

2.3. Results

The implementation of the affective objectives will be examined with the help of the means, which give us information on the extent to which the implementation is considered possible and standard deviations, which tell about the agreement among the raters. The cardinals that are used for different situations as well as the ordinals that stand for the affective objectives in all the forthcoming tables are given in the questionnaire (Appendix 1). The correlations between all the variables have also been computed but only the most relevant ones will be reported here.

1. The ratings given by all student teachers are presented in table 1 (Appendix 3) There will be no detailed discussion based on that table but situations that are considered the best and the worst with each affective objective will be given a brief verbal presentation in the following:

- courage to speak the foreign language is considered to be implemented best in connection with pronunciation and drill exercises which take place in language laboratory and in small-group conversation conducted by a native teacher. The worst situations from the point of view are translation and pronunciation exercises occurring in class.
- from the viewpoint of interest in the foreign language the best situations are small-group conversation conducted by a native teacher or the pupils' own teacher and extensive reading taking place in small groups. The worst

situations are pronunciation exercises and reading aloud occurring in class

- positive attitude towards foreigners is considered to be implemented best in the same situations as above. The situations that are considered the worst from the point-of-view of implementing this objective are oral and written exercises taking place in class.

- the best situations for developing co-operation are the same as above. The following ones are considered to be among the worst: writing a composition, writing from dictation and reading aloud, all taking place in class and pronunciation exercises taking place in the language lab.

- positive attitude towards the study of the language is considered to be implemented best in the same situations as above. The worst situations from the point-of-view of implementing this objective are pronunciation exercises and reading aloud occurring in class.

- the best situations for developing ability to work independently and purposefully are writing a composition in class and small-group conversation conducted by a native teacher. The worst ones are pronunciation exercises, reading aloud, writing from dictation and translation, all taking place in class.

The means and standard deviations of each affective objective for all the different situations together have been counted and they can also be seen in Table 1 (Appendix 3). Generally speaking the values remained rather low, all

below the mean, with the exception of courage to speak the foreign language.

The means and standard deviations of all the affective objectives taken together and the specific and general affective objectives separately were also computed in order to see which types of situations would be the best from the viewpoint of all the affective objectives. The values are to be seen in Tables 2-4 (Appendix 3), which do not, however, give much new information compared to what was presented previously. The best situations for all the affective objectives are small-group conversation conducted either by a native teacher or one's own teacher and extensive reading taking place in small groups. Among the worst ones for each group were pronunciation and reading aloud taking place in class. It could be pointed out that the general affective objectives should not have been combined since they can, in fact, be considered to be opposite: co-operation, on the one hand, and independent and purposeful work, on the other. The correlations between these objectives show, however, that they are not (completely) independent. With two exceptions they range from +.26 to +.59. The exceptions were writing a composition in class and practising structures in writing in class. The correlation between the implementation of developing co-operation and ability to work independently and purposefully was .08 for the former situation and .11 for the latter.

2. The ratings given by student teachers of English, Swedish and the selective languages (German, French and Russian) are given in Tables 5-7 (Appendices 4-5), which will not be discussed in detail. Suffice it to say that from the viewpoint of most of the affective objectives the best and worst situations are the same as with the whole group. The differences between the means of the ratings given by student teachers of each language will be examined by means of Tables 8-19, which give the means and standard deviations of all the affective objectives taken together in each situation for each group as well as those of the specific and general affective objectives taken separately in each situation for each group. The significance of the differences between the means was t-tested. As is to be seen in the tables there were very few significant differences; the ones that were found were the following:

Student teachers of the selective languages gave higher values to the following situations than student teachers of English:

- listening comprehension exercises in class for all affective objectives as well as for specific and general affective objectives
- pronunciation in language lab for specific affective objectives
- written practice in structures in class for specific affective objectives

- writing from dictation in class for specific affective objectives
- extensive reading in small groups for general affective objecgives
- conversation in class for general affective objectives.

Student teachers in English gave higher value to the following situation than student teachers of the selective languages:

- writing a composition in class for general affective objectives.

Student teachers of selective languages gave a higher value to conversation in class for specific affective objectives than student teachers of Swedish.

The differences discovered can hardly be attributed to linguistic factors specific to different languages but they would rather reflect the status of different foreign languages within the comprehensive schoo' system. They also indicate the possibility of different stages of foreign language instruction being better for the implementation of some affective objectives than others. This point would, however, need further studies and real class-room experimentation.

3. In order to see whether the student teachers' prior teaching experience is related to the extent to which they consider it possible to implement the affective ob-

jectives in different situations, ratings given by those who have more than a year's prior teaching experience (N=24) were compared to ratings given by student teachers with no experience (N=25). The mean of the number of years of experience was three years and four months. It was not considered necessary to study teaching experience with regard to different languages because, as was seen above, most of differences between th languages remained insignificant. What significant differences there were occurred when two of the other languages were compared to the selective languages. Eleven of the student teachers of the selective languages remained outside the comparison, anyway, having less teaching experience than one year.

Comparing the ratings given by the two groups of student teachers takes place with the help of Tables 20-23 (Appendices 12-13), which show the means and standard deviations of all affective objectives taken together in each situation and specific and general affective objectives separately in each situation. The means and standard deviations of each affective objective in each situation are available but will not be reported here. The significance of the differences between the means was t-tested. As is to be seen in the tables, very few of the differences were significant. The ones that were found are as follows:

Student teachers with experience rated the following situations better than student teachers with no experience.

- translation in class for all affective objectives
- small-group conversation conducted by the pupils' own teacher for specific affective objectives
- extensive reading in small groups for general affective objectives
- small-group conversation conducted by a native teacher for general affective objectives.

It is difficult to explain why student teachers with experience rated translation in class for all affective objectives better than student teachers with no experience. One plausible explanation is the fact that their teaching method may have been based on translation, which is probably the way they themselves had been taught when at school. It is to be seen, however, that the ratings given by the two groups of student teachers were below the average, which means that the situation is not considered to be very good from the point of view of the affective objectives by either of the groups. The other situations in which differences appeared got values above the mean with experienced student teachers giving higher values than others. It is to be seen that these situations all involve small-group work.

3. Discussion

The main results of the study were given above. At this juncture it will only be stated that the ease of implementation of the affective objectives was not regarded as very great. Small-group work has previously been considered quite important for the ability to work independently and purposefully and also for developing co-operation (Niskanen 1973b). The situations that involved small-group work (with the cognitive objectives of reading comprehension and oral ability) were regarded as the best for the affective objectives in this study, too. This may be because small-group work has recently been given great attention. It has often been dealt with as if it were an end in itself, not a means to achieve some ends, cognitive as well as affective. An important question is whether it is possible to achieve linguistic objectives in group-work in foreign language instruction with pupils speaking their mother tongue, which has been the case in all group-work situations observed by the writer. Would it be good for the achievement of the affective objectives to force teen-age pupils to use the foreign language in group-work, if it were possible ? Are there such school subjects in which the use of group-work promotes the achievement of both cognitive and affective objectives better than in others ?

It was also to be seen that writing a composition in class was rated to be good for achieving ability to work independently and purposefully; on the other hand, it was among the worst for developing co-operation. It is natural that the cognitive objectives of spoken language are better for developing co-operation, which involves oral communication, while the objectives of written language are better suited for developing independence. The question of the priority of those two types of objectives involves values and must be left open.

Some limitations of the present study were given in the beginning and will not be dealt with further in this connection again. A problematic area is the question of the psychometric properties of the instrument that was developed. The content validity of the instrument can be considered satisfactory as far as the situations are concerned but unsatisfactory from the viewpoint of the affective objectives. It might have been better to concentrate on fewer situations and include more affective objectives, general ones in particular. The choice of the situations would, however, have been difficult since there is no information on what situations are the most frequent ones.

The question of the reliability is also an open one. It was not possible to have the same subjects answer the questionnaire twice, which would have given information on the constancy of their ratings, which type of reliabi-

lity would have been most relevant in this connection. Cronbach's alfa is not suitable for an instrument like this in which the items are heterogeneous in the sense that they measure quite different things. Owing to the nature of the sample the results of the study are of limited generalizability.

As regards further studies it would be first necessary to find out which situations are the most frequent ones as has been done in a foreign study (Hall 1974). Then a study of the implementation of a greater number of affective objectives would be possible, which would give basis for real classroom experimentation. Performing studies like this should be a joint enterprise of specialists in different subject-matter areas. The aim would be to get concrete information to be used in curriculum development. Developing realistic curricula would be one way to remove the confidence gap now prevailing between teachers, on the one hand, and school authorities and researchers, on the other.

Bibliography

Bloom, Benjamin S.; Thomas J. Hastings ; George F. Madaus. (eds.) 1971. Handbook on Formative and Summative Evaluation of Student Learning. New York: McGraw-Hill.

Bosco, Frederick J. ; Robert J. DiPietro. 1970. "Bases for Instructional Strategies." Iral 8, 1, 1-19

Deyes, A. F. 1972. "Learning from Dictation." English Language Teaching 26, 2, 149-154.

Green, J. F. 1970. "The Uses of the Mother Tongue and the Teaching of Translation." English Language Teaching 24, 3, 2 7-223.

Hall, P. 1974. Personlighetsfaktorer och undervisningssituationer i främmande språk. Nr 231. Ped.- psyk. institutionen. Lärarhögskolan i Malmö.

Hill, L. A. 1967. Selected Articles on the Teaching of English as a Foreign Language. Oxford University Press.

Jakobovits, Leon A.; Barbara Gordon. 1974. The Context of Foreign Language Teaching. Rowley, Mass.: Newbury House Publishers.

King, P. B. 1973. "Translation in the English Language Course." English Language Teaching Journal, 28, 1, 53-59.

Klausmeier, Herbert J.; Richard J. Ripple. 1971. Learning and Human Abilities. New York: Harper & Row.

Krathwohl, David R.; Benjamin S. Bloom. 1964. Taxonomy of Educational Objectives. Handbook II: Affective Domain. New York: McKay.

Leino, Anna-Liisa. 1974a. The Importance of Objectives in Foreign Language Instruction as Rated by Teachers. Publications de l'Association Finlandese de Linguistique Appliquée. N:o 10. Turku.

Leino, Anna-Liisa. 1974b. "Tavoitteena luetun ymmärtäminen." Kasvatus 6, 359-363.

Leino, Anna-Liisa. 1975a. "Tavoitteena kuullun ymmärtäminen" Tempus 1, 7-11

Leino, Anna-Liisa. 1975b. A Comparison of the Importance of Objectives in Foreign Language Instruction as Rated by In-service Teachers, Student Teachers and Pupils. Research Bulletin N:o 44. Institute of Education. University of Helsinki.

McGregor, Elspeth. 1974. "Advanced English Conversation Classes." English Language Teaching Journal 28, 4, 349-352.

Moody, H. L. B. 1974. "Technique and Art in Reading Aloud." English Language Teaching Journal, 28, 4, 315-324.

Niskanen, Erkki A. 1973a. Research on Educational Aims. Julkaisusarja A: Tutkimusraportti N:o 3. Tampereen yliopiston Kasvatustieteen laitos.

Niskanen, Erkki A. 1973b. Tieteiden välinen koulurakennustutkimus. Reports from the Institute for Educational Research 174. University of Jyväskylä.

Rivers, Wilga M. 1968. Teaching Foreign-Language Skills. University of Chicago Press.

Rivers, Wilga M. 1972. Speaking in Many Tongues. Rowley, Mass.: Newbury House Publishers.

Smith, Othanel B.; William O. Stanley ; J. Harlan Shores. 1957. Fundamentals of Curriculum Development. New York: Harcourt.

Smith, Philip D. Jr. 1971. Toward a Practical Theory of Second-Language Instruction. Philadelphia: The Center for Curriculum Development.

Stevick, Earl W. 1975. "Language Instruction Must Do an About-Face." Modern Language Journal, 58, 8, 379-384.

Taylor, C. V. 1972. "Why Throw out Translation ?" English Language Teaching, 27, 1, 56-58.

Valette, Rebecca M. 1971. "Evaluation of Learning in a Second Language." Handbook on Formative and Summative Evaluation of Student Learning. eds. Bloom, Hastings, Madaus. New York: McGraw-Hill.

Valette, Rebecca M.; Renee S. Disick. 1972. Modern Language Performance Objectives and Individualization. New York: Harcourt Brace Jovanovich.

Dear Student Teacher

The questionnaire consists of a number of foreign language activities listed vertically and some affective objectives of the comprehensive school on the horizontal line. I want you to consider to what extent, in your opinion, it is possible to implement the affective objectives within each activity in the context of the foreign language that you teach at the higher levels of the comprehensive school. Use the scale 1-5 in the following way:

5 = very well
4 = well
3 = rather well
2 = somehow
1 = not at all

Thanking you for the trouble you have taken

Anna-Liisa

What languages are included in your teacher training programme? Mention first the one in which you major _____

Have you worked as a teacher? How long? _____

Abridged version of the questionnaire		I courage to speak the foreign language	II interest in the foreign language	III positive attitude towards foreigners	IV developing co-operation	V positive attitude towards the study of the language	VI ability to work independently and purposefully
1. Pronunciation: a) in class	1.						
b) in small groups	2.						
c) in language lab	3.						
2. Writing a composition: in class	4.						
3. Written practice in structures: in class	5.						
4. Writing from dictation: in class	6.						
5. Extensive reading: a) in class	7.						
b) in small groups	8.						
6. Oral practice in structures: a) in class	9.						
b) in language lab	10.						
7. Intensive reading in class:	11.						
8. Listening comprehension: in class (taperecorder)	12.						
9. Translation: in class	13.						
10. Conversation: a) in class	14.						
b) in small groups (with no teacher)	15.						
c) in small groups (with one's own teacher)	16.						
d) in small groups (with a native teacher)	17.						
11. Reading aloud: in class	18.						

Appendix 2.

1. Pronunciation
- ability to pronounce different sounds and sound combinations
- knowledge of the stress and intonation pattern of the language
- ability to repeat sentences and dialoques
- ability to read phonetic writing
- ability to differentiate between sounds
- ability to distinguish words from each other
- ability to distinguish sentences from each other

2. Writing a composition
- ability to produce words in writing
- ability to spell words correctly
- ability to produce structures in writing
- ability to write on a given topic
- ability to communicate in writing

3. Practising structures in writing
- ability to produce structures in writing
- ability to manipulate a sentence in writing
- ability to produce words in writing
- ability to spell words correctly

4. Writing from dictation
- sound-symbol association
- ability to spell words correctly
- ability to differentiate between sounds
- ability to distinguish words from each other
- ability to distinguish sentences from each other

5. Extensive reading
- reading comprehension
- ability to communicate in writing

6. Oral practice in structures
- ability to produce structures orally
- ability to manipulate a sentence orally
- abilities involved in pronunciation

7. Intensive reading
- reading comprehension
- ability to communicate in writing

8. Practice in listening comprehension
- ability to differentiate between sounds
- ability to distinguish words from each other
- ability to distinguish sentences from each other

9. Translation
- ability to translate orally from the native language into the target language
- ability to translate a text from the native language into the target language
- ability to translate a text from the target language into the native language

10. Conversation
- ability to talk with a native speaker
- ability to speak on a given topic
- ability to produce words and structures orally
- listening comprehension

11. Reading aloud
- sound-symbol association
- abilities involved in pronunciation

Note: knowledge of words and structures is involved in each activity, which is why it was not specificly mentioned.

Table 1. Means and standard deviations of the ratings (N=69)

	I		II		III		IV		V		VI	
	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
1.	2.46	0.72	2.09	0.76	1.94	0.87	2.06	0.92	2.00	0.77	1.62	0.79
2.	3.44	0.85	3.06	0.87	2.54	1.05	2.99	1.09	3.04	0.96	2.46	1.01
3.	4.01	0.81	3.14	1.05	2.84	1.15	1.81	1.06	3.35	0.97	2.91	1.31
4.	2.66	1.05	3.07	0.89	2.70	0.83	1.48	0.72	2.99	0.83	3.74	0.89
5.	2.68	0.96	2.47	0.82	2.07	0.80	1.87	0.82	2.32	0.80	2.54	0.96
6.	2.72	1.17	2.38	0.88	2.09	0.90	1.55	0.72	2.23	0.81	1.99	1.04
7.	2.59	0.75	3.01	0.83	2.96	0.91	2.29	0.96	3.03	0.86	2.68	0.87
8.	3.36	0.94	3.80	0.79	3.52	0.99	3.74	0.90	3.72	0.82	3.29	1.14
9.	2.83	0.77	2.35	0.72	2.01	0.80	2.10	0.86	2.42	0.85	1.99	0.89
10.	3.85	0.75	3.04	0.96	2.57	1.05	1.72	0.97	3.17	0.92	2.79	1.28
11.	2.67	0.79	2.74	0.80	2.49	0.83	2.26	0.99	2.68	0.83	2.43	0.90
12.	2.87	0.84	3.48	0.69	3.23	0.90	2.26	0.99	3.33	0.85	2.88	0.95
13.	2.30	0.88	2.49	0.68	2.23	0.81	2.13	0.97	2.38	0.69	2.51	0.95
14.	2.33	0.91	2.49	0.83	2.57	0.87	2.75	0.96	2.67	0.90	2.33	0.85
15.	3.16	1.01	3.24	0.93	2.96	0.83	3.65	1.03	3.25	0.88	3.07	1.00
16.	3.49	0.90	3.58	0.90	3.30	0.88	3.77	0.89	3.54	1.02	3.04	1.02
17.	3.84	1.01	4.23	0.89	4.23	0.81	3.93	0.94	4.26	0.78	3.35	1.11
18.	2.74	0.97	2.25	0.76	2.13	0.73	1.81	0.84	2.20	0.78	1.77	0.93
Σ	3.00	1.04	3.93	1.01	2.69	1.07	2.45	1.22	2.92	1.03	2.63	1.14

Table 2. The means and standard deviations of all the affective objectives in different situations. (N=69)

1.	2.02	0.84
2.	2.92	1.02
3.	3.01	1.25
4.	2.77	1.10
5.	2.32	0.90
6.	2.17	0.99
7.	2.76	0.90
8.	3.57	0.95
9.	2.28	0.86
10.	2.85	1.18
11.	2.54	0.87
12.	3.00	0.96
13.	2.34	0.84
14.	2.52	0.89
15.	3.22	0.97
16.	3.45	0.96
17.	3.97	0.98
18.	2.15	0.89

Table 3. The means and standard deviations of specific affective objectives in different situations. (N=69)

1.	2.12	0.81
2.	3.02	0.98
3.	3.33	1.08
4.	2.85	0.91
5.	2.37	0.87
6.	2.35	0.97
7.	2.89	0.85
8.	3.60	0.90
9.	2.40	0.83
10.	3.15	1.03
11.	2.64	0.81
12.	3.25	0.85
13.	2.35	0.77
14.	2.51	0.88
15.	3.15	0.91
16.	3.47	0.93
17.	4.14	0.89
18.	2.33	0.84

Table 4. The means and standard deviations of general affective objectives in different situations. (N=69)

1.	1.84	0.88
2.	2.72	1.08
3.	2.36	1.31
4.	2.11	1.02
5.	2.20	0.95
6.	1.77	0.91
7.	2.48	0.93
8.	3.51	1.04
9.	2.04	0.87
10.	2.25	1.26
11.	2.34	0.94
12.	2.57	1.01
13.	2.32	0.97
14.	2.45	0.91
15.	3.36	1.05
16.	3.40	1.02
17.	3.64	1.06
18.	1.79	0.88

Table 5. Means and standard deviations of the ratings (N=34)

	I		II		III		IV		V		VI	
	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
1.	2.29	0.80	2.15	0.70	1.79	0.69	2.03	0.94	1.97	0.67	1.56	0.75
2.	3.47	0.33	3.00	0.82	2.41	0.86	2.85	1.08	2.91	1.08	2.32	0.94
3.	3.83	0.87	2.85	0.98	2.62	1.02	1.59	0.70	3.17	0.94	2.68	1.20
4.	2.32	0.97	2.86	0.78	2.67	0.94	1.35	0.65	2.88	0.84	3.62	0.92
5.	2.41	0.78	2.32	0.64	1.94	0.96	1.68	0.73	2.37	0.73	2.47	0.86
6.	2.35	1.04	2.35	0.77	2.00	0.78	1.41	0.56	2.21	0.73	1.88	0.88
7.	2.41	0.74	3.09	0.79	2.79	0.84	2.09	0.90	2.94	0.78	2.71	0.87
8.	3.17	1.02	3.68	0.64	3.26	0.99	3.71	0.76	3.50	0.78	3.12	1.25
9.	2.88	0.81	2.29	0.68	1.94	0.69	2.00	0.78	2.50	0.75	1.82	0.79
10.	3.67	0.81	2.82	0.83	2.44	0.93	1.50	0.66	3.18	0.90	2.53	1.13
11.	2.53	0.79	2.68	0.84	2.55	0.93	2.06	0.89	2.65	0.77	2.47	0.93
12.	2.85	0.96	3.47	0.71	3.15	0.93	2.03	0.87	3.18	0.97	2.71	0.91
13.	2.15	0.96	2.44	0.70	2.12	0.64	1.88	0.91	2.32	0.64	2.35	0.73
14.	2.35	0.95	2.55	0.82	2.47	0.90	2.68	0.91	2.56	0.93	2.18	0.94
15.	3.12	1.03	3.12	0.91	2,82	0.94	3.56	1.02	3.15	0.78	2.91	1.02
16.	3.50	0.90	3.50	0.86	3.15	0.93	3.85	0.82	3.47	0.93	2.97	0.99
17.	3.91	0.96	4.18	0.90	4.17	0.87	3.79	1.03	4.23	0.92	3.24	1.23
18.	2.71	0.94	2.26	0.67	2.00	0.69	1.71	0.68	2.11	0.64	1.85	0.69

Table 6. Means and standard deviations of the ratings (N=20)

	I		II		III		IV		V		VI	
	x	s	x	s	x	s	x	s	x	s	x	s
1.	2.00	0.59	1.95	0.68	1.85	0.76	2.00	0.73	1.85	0.67	1.55	0.68
2.	3.30	0.73	3.00	0.92	2.45	1.15	3.05	1.05	3.05	0.94	2.45	1.05
3.	3.95	0.76	3.15	0.99	2.80	1.15	1.75	0.97	3.30	0.86	2.95	1.47
4.	2.85	0.93	3.20	1.06	2.40	0.59	1.50	0.76	2.90	0.85	3.70	0.86
5.	2.90	0.97	2.40	0.82	1.90	0.78	1.95	0.88	2.10	0.79	2.50	0.88
6.	3.00	1.08	2.15	0.75	1.90	0.79	1.65	0.75	2.15	0.75	1.85	0.99
7.	2.65	0.59	2.65	0.81	2.65	0.88	2.35	0.81	2.90	0.91	2.50	0.95
8.	3.50	0.89	3.65	1.04	3.45	1.05	3.55	1.10	3.70	0.80	3.25	1.07
9.	2.55	0.76	2.50	0.61	2.00	0.79	2.05	0.83	2.10	0.85	1.85	0.81
10.	3.80	0.70	3.35	0.99	2.60	0.99	1.80	1.00	3.05	1.05	2.70	1.38
11.	2.75	0.64	2.65	0.59	2.25	0.55	2.40	0.94	2.55	0.76	2.45	0.83
12.	2.70	0.66	3.35	0.85	3.25	0.85	2.50	0.83	3.40	0.60	3.10	0.72
13.	2.50	0.69	2.35	0.48	2.10	0.96	2.35	0.88	2.25	0.78	2.60	0.88
14.	2.00	0.86	2.05	0.76	2.35	0.87	2.60	0.88	2.50	1.00	2.50	0.47
15.	2.95	0.94	3.15	0.98	2.85	0.74	3.65	1.18	3.10	1.07	3.25	0.97
16.	3.35	0.99	3.45	0.96	3.30	0.80	3.55	0.88	3.50	1.00	3.10	1.02
17.	3.55	1.09	4.10	0.96	4.15	0.74	3.80	0.89	4.10	0.64	3.50	1.00
18.	2.65	0.81	2.20	0.62	2.10	0.64	1.90	0.91	2.15	0.81	1.70	1.03

Table 7. Means and standard deviations of the ratings (N=15)

	I		II		III		IV		V		VI	
	x	s	x	s	x	s	x	s	x	s	x	s
1.	2.46	0.76	2.13	1.06	2.40	1.03	2.20	1.22	2.26	1.11	1.86	1.06
2.	3.60	0.86	3.26	1.02	2.93	1.37	3.20	1.37	3.33	1.12	2.80	1.14
3.	4.53	0.55	3.80	1.18	3.40	1.43	2.40	1.71	3.80	1.14	3.40	1.37
4.	3.20	1.26	3.40	0.87	3.13	0.67	1.73	0.85	3.33	0.76	4.06	0.84
5.	3.00	1.24	2.93	1.09	2.40	1.05	2.20	0.94	2.60	0.96	2.73	1.37
6.	3.20	1.43	2.73	1.22	2.53	1.26	1.73	1.01	2.40	1.11	2.40	1.45
7.	2.93	0.93	3.33	0.86	3.73	0.75	2.66	1.23	3.40	0.97	2.86	0.79
8.	3.60	0.78	4.26	0.63	4.20	0.60	4.06	0.90	4.26	0.74	3.73	0.93
9.	3.06	0.63	2.26	1.01	2.20	1.08	2.40	1.13	2.66	1.04	2.13	1.27
10.	4.33	0.52	3.13	1.20	2.80	1.47	2.13	1.45	3.33	0.87	3.53	1.33
11.	2.86	1.04	3.00	0.95	2.66	0.94	2.53	1.31	2.93	1.08	2.33	1.04
12.	3.13	0.79	3.66	0.84	3.80	0.81	2.46	1.46	3.60	0.87	3.00	1.34
13.	2.40	0.96	2.80	0.83	2.66	0.87	2.40	1.20	2.66	0.65	2.73	1.48
14.	2.73	0.85	2.93	0.75	3.06	0.94	3.13	1.19	3.13	0.53	2.46	0.88
15.	3.53	1.04	3.66	0.84	3.40	0.54	3.86	0.88	3.66	0.75	3.20	1.08
16.	3.66	0.86	3.93	0.91	3.66	0.85	3.86	1.08	3.73	1.31	3.13	1.19
17.	4.06	1.02	4.53	0.79	4.46	0.76	4.40	0.66	4.53	0.54	3.40	1.06
18.	2.93	1.36	2.26	1.16	2.46	0.89	1.93	1.17	2.46	1.04	2.13	1.26

Table 8. The means and standard deviations of all the affective objectives in each situation. Ratings given by student teachers of Swedish (N=20) and English (N=34).

		N=20	N=34	t
1.	$\bar{x}$	1.86	1.96	-0.47
	s	0.69	0.79	
2.	$\bar{x}$	2.88	2.82	0.20
	s	1.03	1.02	
3.	$\bar{x}$	2.98	2.79	0.54
	s	1.24	1.17	
4.	$\bar{x}$	2.75	2.61	0.44
	s	1.09	1.09	
5.	$\bar{x}$	2.29	2.19	0.39
	s	0.92	0.78	
6.	$\bar{x}$	2.11	2.03	0.29
	s	0.96	0.86	
7.	$\bar{x}$	2.61	2.67	-0.24
	s	0.84	0.88	
8.	$\bar{x}$	3.51	3.40	0.38
	s	1.00	0.95	
9.	$\bar{x}$	2.17	2.23	-0.25
	s	0.81	0.83	
10.	$\bar{x}$	2.88	2.69	0.56
	s	1.21	1.11	
11.	$\bar{x}$	2.50	2.49	0.04
	s	0.74	0.88	
12.	$\bar{x}$	3.05	2.89	0.64
	s	0.78	1.00	
13.	$\bar{x}$	2.35	2.21	0.60
	s	0.80	0.79	
14.	$\bar{x}$	2.33	2.46	-0.51
	s	0.84	0.92	
15.	$\bar{x}$	3.15	3.11	0.13
	s	1.02	0.98	
16.	$\bar{x}$	3.37	3.40	-0.10
	s	0.95	0.95	
17.	$\bar{x}$	3.86	3.92	-0.21
	s	0.93	1.04	
18.	$\bar{x}$	2.11	2.07	0.16
	s	0.86	0.80	

Table 9. The means and standard deviations of the specific affective objectives in each situation. Ratings given by student teachers of Swedish(N=20) and English (N=34).

		N=20	N=34	t
1.	$\bar{x}$	1.91	1.97	-0.30
	s	0.67	0.69	
2.	$\bar{x}$	2.95	2.77	0.63
	s	0.99	0.95	
3.	$\bar{x}$	3.30	2.88	1.42
	s	1.03	1.00	
4.	$\bar{x}$	2.83	2.80	0.11
	s	0.91	0.85	
5.	$\bar{x}$	2.32	2.19	0.53
	s	0.92	0.70	
6.	$\bar{x}$	2.30	2.18	0.47
	s	0.94	0.77	
7.	$\bar{x}$	2.71	2.94	-1.04
	s	0.81	0.68	
8.	$\bar{x}$	3.57	3.48	0.34
	s	0.95	0.83	
9.	$\bar{x}$	2.28	2.24	0.21
	s	0.79	0.74	
10.	$\bar{x}$	3.20	2.81	1.35
	s	1.03	0.93	
11.	$\bar{x}$	2.55	2.62	0.33
	s	0.66	0.84	
12.	$\bar{x}$	3.17	3.26	-0.39
	s	0.73	0.88	
13.	$\bar{x}$	2.30	2.29	0.04
	s	0.75	0.66	
14.	$\bar{x}$	2.22	2.52	-1.20
	s	0.85	0.88	
15.	$\bar{x}$	3.01	3.03	-0.07
	s	0.94	0.88	
16.	$\bar{x}$	3.40	3.37	0.11
	s	0.94	0.91	
17.	$\bar{x}$	3.97	4.19	-0.84
	s	0.90	0.89	
18.	$\bar{x}$	2.27	2.12	0.72
	s	0.75	0.66	

df= 52, t=2.01^{x}, 2.68^{xx}, 3.50^{xxx}

Table 10. The means and standard deviations of the general affective objectives in each situation. Ratings given by student teachers of Swedish (N=20) and English (N=34).

		N=20	N=34	t
1.	x	1.77	1.56	0.98
	s	0.73	0.74	
2.	x	2.75	2.32	1.43
	s	1.09	0.93	
3.	x	2.35	2.68	-0.87
	s	1.38	1.20	
4.	x	2.60	2.48	0.30
	s	1.36	1.38	
5.	x	2.22	2.47	-0.97
	s	0.91	0.85	
6.	x	1.75	1.88	-0.51
	s	0.88	0.87	
7.	x	2.42	2.71	-1.14
	s	0.88	0.86	
8.	x	3.40	3.12	0.84
	s	1.09	1.24	
9.	x	1.95	1.82	0.55
	s	0.82	0.78	
10.	x	2.25	2.53	-0.79
	s	1.28	1.12	
11.	x	2.42	2.47	-0.19
	s	0.88	0.92	
12.	x	2.80	2.71	0.36
	s	0.82	0.90	
13.	x	2.47	2.35	0.50
	s	0.88	0.72	
14.	x	2.55	2.18	1.51
	s	0.78	0.93	
15.	x	3.45	2.91	1.75
	s	1.09	1.01	
16.	x	3.32	2.97	1.24
	s	0.97	0.98	
17.	x	3.65	3.24	1.34
	s	0.95	1.22	
18.	x	1.80	1.65	
	s	0.97	0.68	

df=52, t=2.01^{x}, 2.68^{xx}, 3.50^{xxx}

Table 11. The means and standard deviations of each affective objective in all situations. Ratings given by student teachers of Swedish (N=20) and English (N=34).

		N=20	N=34	t
I	x	2.99	2.91	0.27
	s	0.97	1.07	
II	x	2.90	2.90	0.00
	s	1.01	0.95	
III	x	2.61	2.61	0.00
	s	1.01	0.95	
IV	x	2.49	2.33	0.46
	s	1.17	1.19	
V	x	2.87	2.89	-0.68
	s	1.02	0.99	
VI	x	2.70	2.56	0.43
	s	1.14	1.09	

Appendix 8.

Table 12. The means and standard deviations of all the affective objectives in each situation. Ratings given by student teachers of English (N=34) and selectives (N=15).

		N=34	N=15	t
1.	$\bar{x}$	1.96	2.21	-0.80
	s	0.97	1.05	
2.	$\bar{x}$	2.82	3.18	-0.98
	s	1.02	1.19	
3.	$\bar{x}$	2.79	3.55	-1.74
	s	1.17	1.43	
4.	$\bar{x}$	2.61	3.14	-1.47
	s	1.09	1.13	
5.	$\bar{x}$	2.19	2.64	-1.32
	s	0.78	1.15	
6.	$\bar{x}$	2.03	2.49	-1.18
	s	0.86	1.33	
7.	$\bar{x}$	2.75	3.15	-1.26
	s	0.88	1.01	
8.	$\bar{x}$	3.40	4.01	-2.22^{x}
	s	0.95	0.82	
9.	$\bar{x}$	2.23	2.45	-0.67
	s	0.83	1.09	
10.	$\bar{x}$	2.69	3.20	-1.23
	s	1.11	1.36	
11.	$\bar{x}$	2.49	2.71	-0.66
	s	0.88	1.09	
12.	$\bar{x}$	2.89	3.27	-1.07
	s	1.00	1.15	
13.	$\bar{x}$	2.21	2.60	-1.25
	s	0.79	1.04	
14.	$\bar{x}$	2.46	2.90	-1.50
	s	0.92	0.92	
15.	$\bar{x}$	3.11	3.55	-1.49
	s	0.98	0.89	
16.	$\bar{x}$	3.40	3.60	-0.59
	s	0.96	1.08	
17.	$\bar{x}$	3.92	4.23	-1.01
	s	1.04	0.91	
18.	$\bar{x}$	2.07	2.36	-0.82
	s	0.80	1.20	

Table 13. The means and standard deviations of the specific affective objectives in each situation. Ratings given by student teachers of English (N=34) and selectives (N=15).

		N=34	N=15	t
1.	$\bar{x}$	1.97	2.31	-1.12
	s	0.69	1.03	
2.	$\bar{x}$	2.77	3.28	-1.47
	s	0.95	1.13	
3.	$\bar{x}$	2.88	3.88	-2.74^{xx}
	s	1.00	1.19	
4.	$\bar{x}$	2.80	3.26	-1.59
	s	0.85	0.92	
5.	$\bar{x}$	2.19	2.73	-2.76^{xx}
	s	0.70	1.12	
6.	$\bar{x}$	2.18	2.71	-2.32^{x}
	s	0.77	1.30	
7.	$\bar{x}$	2.94	3.34	-1.45
	s	0.68	0.92	
8.	$\bar{x}$	3.48	4.08	-2.43^{x}
	s	0.83	0.74	
9.	$\bar{x}$	2.24	2.54	-0.99
	s	0.74	1.02	
10.	$\bar{x}$	2.81	3.39	-1.59
	s	0.93	1.21	
11.	$\bar{x}$	2.62	2.86	-0.77
	s	0.84	1.01	
12.	$\bar{x}$	3.26	3.54	-1.00
	s	0.88	0.86	
13.	$\bar{x}$	2.29	2.63	-1.34
	s	0.66	0.84	
14.	$\bar{x}$	2.52	2.96	-1.67
	s	0.88	0.80	
15.	$\bar{x}$	3.03	3.56	-1.99
	s	0.88	0.81	
16.	$\bar{x}$	3.37	3.74	-1.18
	s	0.91	1.01	
17.	$\bar{x}$	4.19	4.39	-0.74
	s	0.89	0.81	
18.	$\bar{x}$	2.12	2.52	-1.21
	s	0.66	1.15	

df=47, t=01^{x}, 2.68^{xx}, 3.50^{xxx}

Appendix 9.

Table 14. The means and standard deviations of the general affective objectives in each situation. Ratings given by student teachers of English (N=34) and selectives (N=15).

		N=34	N=15	t
1.	x	1.56	2.03	-1.51
	s	0.74	1.05	
2.	x	2.32	3.00	-1.79
	s	0.93	1.28	
3.	x	2.68	2.90	-0.45
	s	1.20	1.63	
4.	x	3.62	2.89	2.89^{xx}
	s	0.91	1.44	
5.	x	2.47	2.46	0.02
	s	0.85	1.21	
6.	x	1.88	2.06	-0.47
	s	0.87	1.29	
7.	x	2.71	2.76	-0.15
	s	0.86	1.04	
8.	x	3.12	3.89	-2.32^{x}
	s	1.24	0.93	
9.	x	1.82	2.26	-1.25
	s	0.78	1.21	
10.	x	2.53	2.83	-0.65
	s	1.12	1.55	
11.	x	2.47	2.43	0.11
	s	0.92	1.19	
12.	x	2.71	2.73	-0.04
	s	0.90	1.42	
13.	x	2.35	2.56	-0.88
	s	0.72	1.36	
14.	x	2.18	2.79	-2.42^{x}
	s	0.93	1.10	
15.	x	2.91	3.53	-1.88
	s	1.01	1.03	
16.	x	2.97	3.49	-1.43
	s	0.98	1.19	
17.	x	3.24	3.90	-1.91
	s	1.22	1.01	
18.	x	1.65	2.03	-1.09
	s	0.68	1.22	

df=47, t=2.01^{x}, 2.68^{xx}, 3.50^{xxx}

Table 15. The means and standard deviations of each affective objective in all the situations. Ratings given by student teachers of English (N=34) and selectives (N=15).

		N=34	N=15	t
I	x	2.91	3.28	-1.04
	s	1.07	1.13	
II	x	2.90	3.22	-0.89
	s	0.95	1.17	
III	x	2.61	3.10	-1.34
	s	1.03	1.19	
IV	x	2.33	2.73	-0.92
	s	1.19	1.41	
V	x	2.89	3.22	-0.94
	s	0.99	1.13	
VI	x	2.56	2.88	-0.79
	s	1.09	1.31	

Appendix 10.

Table 16. The means and standard deviations of all the affective objectives in each situation. Ratings given by student teachers of selectives (N=15) and Swedish (N=20).

		N=15	N=20	t
1.	$\bar{x}$	2.21	1.86	1.08
	s	1.05	0.69	
2.	$\bar{x}$	3.18	2.88	0.75
	s	1.19	1.03	
3.	$\bar{x}$	3.55	2.98	1.19
	s	1.43	1.24	
4.	$\bar{x}$	3.14	2.75	0.99
	s	1.13	1.09	
5.	$\bar{x}$	2.64	2.29	0.93
	s	1.15	0.92	
6.	$\bar{x}$	2.49	2.11	0.90
	s	1.33	0.96	
7.	$\bar{x}$	3.15	2.61	1.63
	s	1.01	0.84	
8.	$\bar{x}$	4.01	3.51	1.44
	s	0.82	1.00	
9.	$\bar{x}$	2.45	2.17	0.80
	s	1.09	0.81	
10.	$\bar{x}$	3.20	2.88	0.69
	s	1.36	1.21	
11.	$\bar{x}$	2.71	2.50	0.62
	s	1.09	0.74	
12.	$\bar{x}$	3.27	3.05	0.61
	s	1.15	0.78	
13.	$\bar{x}$	2.60	2.35	0.74
	s	1.04	0.80	
14.	$\bar{x}$	2.90	2.33	1.82
	s	0.92	0.84	
15.	$\bar{x}$	3.55	3.15	1.19
	s	0.89	1.02	
16.	$\bar{x}$	3.60	3.37	0.63
	s	1.08	0.95	
17.	$\bar{x}$	4.23	3.86	1.13
	s	0.91	0.93	
18.	$\bar{x}$	2.36	2.11	0.66
	s	1.20	0.86	

Table 17. The means and standard deviations of the specific affective objectives in each situation. Ratings given by student teachers of selectives (N=15) and Swedish (N=20).

		N=15	N=20	t
1.	$\bar{x}$	2.31	1.91	-1.25
	s	1.03	0.67	
2.	$\bar{x}$	3.28	2.95	-0.87
	s	1.13	0.99	
3.	$\bar{x}$	3.88	3.30	-1.45
	s	1.19	1.03	
4.	$\bar{x}$	3.26	2.83	-1.32
	s	0.92	0.91	
5.	$\bar{x}$	2.73	2.32	-1.12
	s	1.12	0.92	
6.	$\bar{x}$	2.71	2.30	-1.00
	s	1.30	0.94	
7.	$\bar{x}$	3.34	2.71	-2.03
	s	0.92	0.81	
8.	$\bar{x}$	4.08	3.57	-1.72
	s	0.74	0.95	
9.	$\bar{x}$	2.54	2.28	-0.79
	s	1.02	0.79	
10.	$\bar{x}$	3.39	3.20	-0.47
	s	1.21	1.03	
11.	$\bar{x}$	2.86	2.55	-0.99
	s	1.01	0.66	
12.	$\bar{x}$	3.54	3.17	-1.29
	s	0.86	0.73	
13.	$\bar{x}$	2.63	2.30	-1.16
	s	0.84	0.75	
14.	$\bar{x}$	2.96	2.22	-2.55^{x}
	s	0.80	0.85	
15.	$\bar{x}$	3.56	3.01	-1.79
	s	0.81	0.94	
16.	$\bar{x}$	3.74	3.40	-0.98
	s	1.01	0.94	
17.	$\bar{x}$	4.39	3.97*	-0.39
	s	0.81	0.90	
18.	$\bar{x}$	2.52	2.27	-0.70
	s	1.15	0.75	

df=33, t=2.04^{x}, 2.74^{xx}, 3.61^{xxx}

Appendix 11.

Table 18. The means and standard deviations of the general affective objectives in each situation. Ratings given by student teachers of selectives (N=15) and Swedish (N=20).

		N=15	N=20	t
1.	$\bar{x}$	2.03	1.77	-0.79
	s	1.05	0.73	
2.	$\bar{x}$	3.00	2.75	-0.59
	s	1.28	1.09	
3.	$\bar{x}$	2.90	2.35	-1.02
	s	1.63	1.38	
4.	$\bar{x}$	2.89	2.60	-0.58
	s	1.44	1.36	
5.	$\bar{x}$	2.46	2.22	-0.62
	s	1.21	0.91	
6.	$\bar{x}$	2.06	1.75	-0.77
	s	1.29	0.88	
7.	$\bar{x}$	2.76	2.42	-0.98
	s	1.04	0.88	
8.	$\bar{x}$	3.89	3.40	-1.38
	s	0.93	1.09	
9.	$\bar{x}$	2.26	1.95	-0.82
	s	1.21	0.82	
10.	$\bar{x}$	2.83	2.25	-1.13
	s	1.55	1.28	
11.	$\bar{x}$	2.43	2.42	-0.02
	s	1.19	0.88	
12.	$\bar{x}$	2.73	2.80	0.16
	s	1.42	0.82	
13.	$\bar{x}$	2.56	2.47	-0.21
	s	1.36	0.88	
14.	$\bar{x}$	2.79	2.55	-0.69
	s	1.10	0.78	
15.	$\bar{x}$	3.53	3.45	-0.21
	s	1.03	1.09	
16.	$\bar{x}$	3.49	3.32	-0.43
	s	1.19	0.97	
17.	$\bar{x}$	3.90	3.65	-0.71
	s	1.01	0.95	
18.	$\bar{x}$	2.03	1.80	-0.58
	s	1.22	0.97	

df=33, t=2.04^{x}, 2.74^{xx}, 3.61^{xx}

Table 19. The means and standard deviations of each affective objective in all the situations. Ratings given by student teachers of selectives (N=15) and Swedish (N=20).

		N=15	N=20	t
I	$\bar{x}$	3.28	2.99	0.77
	s	1.13	0.97	
II	$\bar{x}$	3.22	2.90	0.81
	s	1.17	1.01	
III	$\bar{x}$	3.10	2.61	1.23
	s	1.19	1.04	
IV	$\bar{x}$	2.73	2.49	0.51
	s	1.41	1.17	
V	$\bar{x}$	3.22	2.87	0.91
	s	1.13	1.02	
VI	$\bar{x}$	2.88	2.70	0.41
	s	1.31	1.14	

Table 20. The means and standard deviations of all the affective objectives in each situation. Student teachers with teaching experience (N=24) and with no experience (N=25).

		N=24	N=25	t
1.	$\bar{x}$	2.00	1.94	0.25
	s	0.79	0.82	
2.	$\bar{x}$	3.10	2.71	1.38
	s	0.98	0.95	
3.	$\bar{x}$	3.12	2.87	0.69
	s	1.29	1.17	
4.	$\bar{x}$	2.79	2.67	0.34
	s	1.14	1.07	
5.	$\bar{x}$	2.26	2.20	0.23
	s	0.87	0.88	
6.	$\bar{x}$	2.17	2.06	0.40
	s	0.92	0.96	
7.	$\bar{x}$	2.76	2.76	0.00
	s	0.83	0.98	
8.	$\bar{x}$	3.77	3.42	1.29
	s	0.87	0.98	
9.	$\bar{x}$	2.40	2.10	1.20
	s	0.85	0.85	
10.	$\bar{x}$	3.02	2.69	0.94
	s	1.23	1.15	
11.	$\bar{x}$	2.48	2.57	-0.34
	s	0.92	0.87	
12.	$\bar{x}$	3.00	2.96	0.14
	s	0.94	0.92	
13.	$\bar{x}$	2.95	2.40	2.48^{x}
	s	0.76	0.90	
14.	$\bar{x}$	2.62	2.46	0.58
	s	0.97	0.91	
15.	$\bar{x}$	3.49	3.14	1.25
	s	0.83	1.06	
16.	$\bar{x}$	3.80	3.27	1.96
	s	0.89	0.96	
17.	$\bar{x}$	4.26	3.70	2.01
	s	0.81	1.08	
18.	$\bar{x}$	2.12	2.20	-0.31
	s	0.87	0.87	

Table 21. The means and standard deviations of th specific affective objectives in each situation.Student teachers with teaching experience (N=24) and with no experience (N=25).

		N=24	N=25	t
1.	$\bar{x}$	2.12	2.00	0.53
	s	0.78	0.75	
2.	$\bar{x}$	3.22	2.76	1.69
	s	0.93	0.93	
3.	$\bar{x}$	3.47	3.16	1.01
	s	1.04	1.05	
4.	$\bar{x}$	2.83	2.77	0.22
	s	0.94	0.88	
5.	$\bar{x}$	2.29	2.28	0.04
	s	0.82	0.87	
6.	$\bar{x}$	2.37	2.29	0.29
	s	0.87	0.96	
7.	$\bar{x}$	2.88	2.93	-0.20
	s	0.78	0.92	
8.	$\bar{x}$	3.72	3.52	0.76
	s	0.89	0.90	
9.	$\bar{x}$	2.53	2.23	1.24
	s	0.85	0.80	
10.	$\bar{x}$	3.32	2.94	1.23
	s	1.04	1.07	
11.	$\bar{x}$	2.55	2.65	-0.40
	s	0.92	0.77	
12.	$\bar{x}$	3.26	3.17	0.38
	s	0.80	0.81	
13.	$\bar{x}$	2.33	2.41	-0.35
	s	0.74	0.81	
14.	$\bar{x}$	2.60	2.46	0.52
	s	0.96	0.87	
15.	$\bar{x}$	3.41	3.07	1.29
	s	0.74	1.04	
16.	$\bar{x}$	3.84	3.29	2.10^{x}
	s	0.86	0.96	
17.	$\bar{x}$	4.40	3.98	1.71
	s	0.71	0.95	
18.	$\bar{x}$	2.31	2.39	-0.33
	s	0.80	0.82	

df=47, t=2.07^{x}, 2.81^{xx}, 3.77^{xxx}

Table 22. The means and standard deviations of the general affective objectives in each situation. Student teachers with teaching experience (N=24) and with no experience (N=25).

		N=24	N=25	t
1.	$\bar{x}$	1.78	1.84	-0.24
	s	0.75	0.94	
2.	$\bar{x}$	2.85	2.62	0.78
	s	1.03	0.97	
3.	$\bar{x}$	2.43	2.30	0.33
	s	1.45	1.18	
4.	$\bar{x}$	2.66	2.48	0.44
	s	1.44	1.35	
5.	$\bar{x}$	2.20	2.06	0.51
	s	0.97	0.90	
6.	$\bar{x}$	1.79	1.62	0.69
	s	0.88	0.79	
7.	$\bar{x}$	2.51	2.44	0.25
	s	0.88	1.02	
8.	$\bar{x}$	3.87	3.24	2.22^{x}
	s	0.82	1.10	
9.	$\bar{x}$	2.14	1.86	1.13
	s	0.81	0.89	
10.	$\bar{x}$	2.42	2.20	0.59
	s	1.36	1.16	
11.	$\bar{x}$	2.32	2.42	-0.35
	s	0.91	1.03	
12.	$\bar{x}$	2.47	2.54	-0.24
	s	0.97	1.00	
13.	$\bar{x}$	2.22	2.38	-0.57
	s	0.81	1.07	
14.	$\bar{x}$	2.66	2.46	0.69
	s	1.00	0.98	
15.	$\bar{x}$	3.66	3.28	1.25
	s	0.98	1.09	
16.	$\bar{x}$	3.74	3.24	1.74
	s	0.94	1.02	
17.	$\bar{x}$	3.99	3.28	2.34^{x}
	s	0.93	1.14	
18.	$\bar{x}$	1.74	1.82	-0.32
	s	0.87	0.83	

df=47, t=2.07^{x}, 2.81^{xx}, 3.77^{xx}

Table 23. The means and standard deviations on each affective objective in all the situations. Student teachers with teaching experience (N=24) and with no experience (N=25).

		N=24	N=25	t
I	$\bar{x}$	3.07	2.92	0.48
	s	1.11	0.99	
II	$\bar{x}$	3.03	2.83	0.67
	s	1.03	1.01	
III	$\bar{x}$	2.73	2.62	0.35
	s	1.08	1.03	
IV	$\bar{x}$	2.52	2.40	0.33
	s	1.24	1.20	
V	$\bar{x}$	3.04	2.79	0.82
	s	1.01	1.06	
VI	$\bar{x}$	2.75	2.49	0.77
	s	1.21	1.10	

Previous Issues in this Series

No. 1 The Effectiveness of Punishments and the School Climate by OLLI SIPINEN. May, 1957. 10 pp. Out of print.

No. 2 The Balance of Instructional Situations by MATTI KOSKENNIEMI. Nov., 1957 (reprint 1972). 7 pp.

No. 3 On Deceit Practiced in Finnish Grammar Schools at Written Tasks by OLAVI PÄIVÄNSALO. Nov., 1957. 5 pp. Out of print.

No. 4 Comparison between Reading Comprehension and Reading Aloud by KAISA HÄLINEN. March, 1958. 9 pp. Out of print.

No. 5 Ten Test-Papers in the Swedish Language as Graded by Ten Teachers by VÄINÖ HEIKKINEN & ANITA HAVELA. Sept., 1958. 5 pp. Out of print.

No. 6 The Awarding of School Marks by TOIVO VAHERVUO. Sept., 1958. 5 pp Out of print.

No. 7 Some Comments on the Uniformity of the 'Experimental Period' in the History of Soviet Education by MATTI KOSKENNIEMI. Feb., 1959. 18 pp. Out of print.

No. 8 Motives for the Choice of the Teaching Profession Correlated with Success in the Entrance Examination and in Student Teaching by MATTI KOSKENNIEMI. Feb., 1960. 11 pp. Out of print.

No. 9 One's Own Teacher and the Choice of Teaching Profession by MATTI KOSKENNIEMI & EIVI LIHTONEN. Sept., 1960. 14 pp. Out of print.

No. 10 The Curriculum of School Mathematics and Mathematical Performance. An Experimental Study by PAAVO MALINEN. Sept., 1961. 50 pp. Out of print.

No. 11 Prognostic Value of Some Psychological Test Results Correlated with Student Teaching Marks by MARJA-LEENA KÄYHTY. Dec., 1961. 10 pp. Out of print.

No. 12 Factors Constituting Classroom Climate by OLLI SIPINEN. March, 1963. 10 pp. Out of print.

No. 13 On the Changes in the Educational Attitudes of Young Teacher by VÄINÖ HEIKKINEN. March, 1963. 14 pp. Out of print.

No. 14 Teacher Training in Retrospection. A Preliminary Report by VÄINÖ HEIKKINEN. Feb., 1964. 21 pp. Out of print.

No. 15 Placement of Young Elementary School Teachers by MATTI KOSKENNIEMI. May, 1965 (reprint 1972). 9 pp.

No. 16 Some Problems in Combining the Individual Tutors' Marks into a Final Mark in Teaching Ability by JOHANNES ALIKOSKI. March, 1966. 25 pp. Out of print.

No. 17 The Finnish Senior Secondary Research Project I. General Presentation of the Project and Its Original Subjects by ANNA-LIISA SYSIHARJU. Sept., 1967. 31 pp.

No. 18 The Finnish Senior Secondary Research Project II. Departure from Junior Secondary and Transfer to Senior Secondary by ANNA-LIISA SYSIHARJU. Oct., 1967. 52 pp. Out of print.

No. 19 Relationships between Absences from School and Certain Factors Related to School. A Study on Elementary School Grades Three to Six by PERTTI KANSANEN. Nov., 1967. 10 pp.

No. 20 On the Anxiety Associated with School Attendance and the Grammar School Entrance Examination by EEVA PATJAS. May, 1968. 16 pp.

No. 21 School Achievement and Personality. I: Design and Hypotheses, IV: Results and Discussion by ERKKI A. NISKANEN. Oct., 1968. 51 pp.

No. 22 School Achievement and Personality. II: Operations at the Variable Level by ERKKI A. NISKANEN. Oct., 1968. 124 pp.

No. 23 School Achievement and Personality. III: Operations at the Factor Level by ERKKI A. NISKANEN. Oct., 1968. 39 pp.

No. 24 The Effectiveness of Two Methods of Teaching Englich as a Foreign Language in Some Finnish Secondary Schools by DANIEL J. CASEY. Nov., 1968. 37 pp.

No. 25 The Learning of Elementary Algebra. An Empirical Investigation of the Results of Learning in a Simplified School Learning System by PAAVO MALINEN. Jan., 1969. 85 pp.

No. 26 Investigations into the Instructional Process. I. Some Methodological Problems by MATTI KOSKENNIEMI and ERKKI KOMULAINEN in collaboration with Anna-Kaarina Falck and Pentti Holopainen. Oct., 1969 (reprint 1972). 35 pp.

No. 27 Investigations into the Instructional Process. II. Objectivity of Coding in a Modified Flanders Interaction Analysis by ERKKI KOMULAINEN. Dec., 1970. 26 pp.

No. 28 Investigations into the Instructional Process. III. P-technique Treatment of Observational Data by ERKKI KOMULAINEN. Jan., 1971. 41 pp.

No. 29 Investigations into the Instructional Process. IV. Teaching as a Stochastic Process by ERKKI KOMULAINEN. Feb., 1971. 24 pp.

No. 30 Investigations into the Instructional Process. V. Experiences with the Bellack Classification System by KAI KARMA. Jan., 1972. 16 pp.

No. 31 Investigations into the Instructional Process. VI. Group Work as a Social Interaction Process. A Case Approach by PENTTI HOLOPAINEN. May, 1972. 34 pp.

No. 32 Investigations into the Instructional Process. VII. Non-verbal Behaviour in Group Work. Observational Technique and Typology of Pupils' Work by MARJA MARTIKAINEN. Sept., 1972. 18 pp.

No. 33 English School Achievements and Some Student Characteristics. I. On the Relationships of Personality and Intelligence Variables to English School Achievements by ANNA-LIISA LEINO. Oct., 1972. 50 pp.

No. 34 Investigations into the Instructional Process. VIII. On the Problems of Variable Construction from Flanders' Interaction Matrix with Special Emphasis on the Stochastic Nature of Classroom Communication by ERKKI KOMULAINEN. Feb., 1973. 78 pp.

No. 35 Zur Problematik des Unterrichts by CHR. PETROW CHRISTOW. April, 1973. 11 pp.

No. 36 Investigations into the Instructional Process. IX. Pupils' Goal-related Behavior during the Instructional Interaction by MATTI KOSKENNIEMI & PENTTI HOLOPAINEN. June, 1973. 17 pp.

No. 37 The Behaviour of Supervisors assessed by Student Teachers by SEPPO KONTIAINEN. Nov., 1973. 186 pp. Out of print.

No. 38 The Ability to Structure Acoustic Material as a Measure of Musical Aptitude. I. Background Theory and Pilot Studies by KAI KARMA. Nov., 1973. 19 pp.

No. 39 Investigations into the Instructional Process. X. Report of the DPA Helsinki, Phase One by MATTI KOSKENNIEMI & ERKKI KOMULAINEN. Feb., 1974. 35 pp.

No. 40 English School Achievements and Some Student Characteristics II. On the Relationships of Motivational and Auditory Variable to English School Achievements. Final Analyses by ANNA-LIISA LEINO. March, 1974. 48 pp.

No. 41 Foreign Language Curriculum. An Investigation into Objectives, Achievements and Student Characteristics by ANNA-LIISA LEINO. June, 1974. 27 pp.

No. 42 DPA Helsinki System for Describing Instructional Processes. Manual. Prepared and edited on behalf of the Research Team DPA Helsinki by MATTI KOSKENNIEMI, KAI KARMA and MARJA MARTIKAINEN. November, 1974. 34 pp.

No. 43 The Ability to Structure Acoustic Material as a Measure of Musical Aptitude. 2. Test Construction and Results by KAI KARMA. February, 1975. 21 pp.

No. 44 A Comparison of the Importance of Objectives in Foreign Language Instruction as Rated by In-Service Teachers, Student Teachers and Pupils by Anna-Liisa Leino. June, 1975. 35 pp.

Distribution by PEDUCA r.y., Fabianinkatu 28, SF - 00100 Helsinki 10